NEXXTECH™ MC

8001231

Professional Weather Station

USER'S MANUAL

INTRODUCTION

Congratulations on your purchase of the Professional Atomic Weather Station.

The main unit is capable of weather forecasting for the next 12-24 hours, keeping track of the maximum and minimum temperature, humidity, atmospheric pressure and moon phases. No wire installation is required and operates at 433 MHz.

In order to enjoy this weather station with its many features, it is recommended that you read these instructions carefully before using the weather station.

The package consists of the following:
• 1 x Radio Controlled Weather Station
• 1 x Remote Sensor

Up to three remote sensors can be utilized with the Weather Station.

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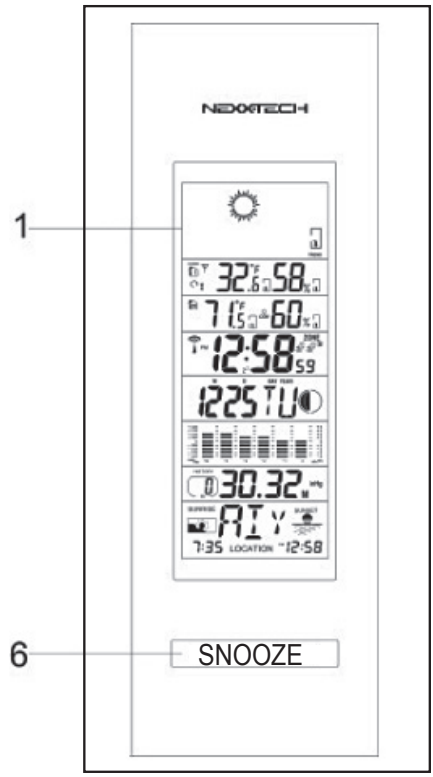
MAIN UNIT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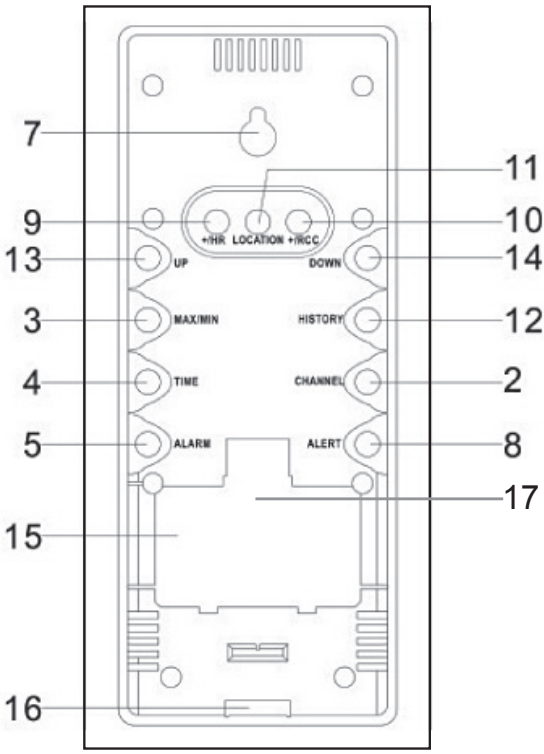
SNOOZE


7
11
9
10
+HR LOCATION +/°C
13
UP
DOWN
14
3
MAX/MIN
HISTORY
12
4
TIME
CHANNEL
2
5
ALARM
ALERT
8
17
15
16

MAIN UNIT

1 – 8-LINE LCD DISPLAY
Facilitates easy reading of weather forecast, indoor and outdoor temperatures, humidity trends for temperature, time/dual alarm, calendar, moon phase, pressure bar chart, barometer, sunrise and sunset of 50 cities.

2 – CHANNEL BUTTON
Selects remote sensor to be displayed (for remote sensors 2 and 3); activates or deactivates the remote outdoor thermometer sensor reception.

3 – MAX/MIN BUTTON
Recalls the maximum and minimum temperatures as well as maximum and minimum for indoor and remote sensors.

4 – TIME BUTTON
For setting display variations and programming different values.

5 – ALARM BUTTON
Display of alarm1, alarm2, or setting alarm status.

6 – SNOOZE BUTTON
Activates the snooze function.

7 – WALL MOUNT HOLE
For mounting the main unit on a wall.

8 – ALERT BUTTON
Display and programming of temperature alarm alerts.

9 – +/HR BUTTON
Advances the value of setting time, alarm, city or switches time zone.

10 – -/RCC BUTTON
Decreases the value of setting time, alarm, city, forces atomic time signal reception, or sets alarm on/off.

MAIN UNIT

11 – LOCATION BUTTON
Sets the city sunrise and sunset.

12 – HISTORY BUTTON
Set the initial latitude, or views the pressure history of the past 12 hours.
Advances the value of a setting.

13 – UP BUTTON
Advances the value of the setting temperature alarm, pressure, or selects the pressure unit in mb/Hpa or inHg.

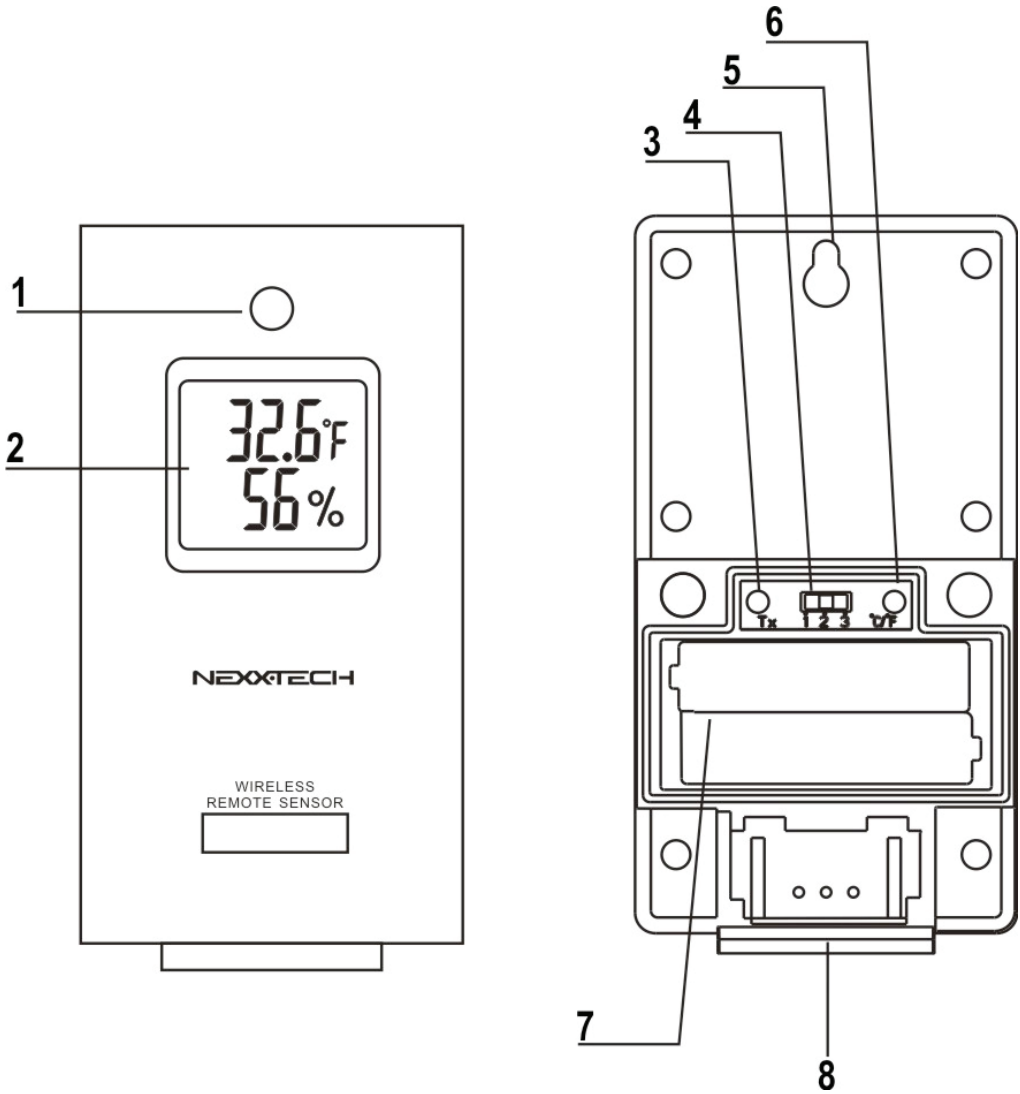
14 – DOWN BUTTON
Decreases the value of setting temperature alarm, or pressure.

15 – BATTERY COMPARTMENT
Requires 2 x AA alkaline batteries (not included).

16 – TABLE STAND
Stands the main unit on a flat surface.

17 – RESET BUTTON
Resets the settings.

REMOTE SENSOR



REMOTE SENSOR

1 – LED CONTROL LIGHT
Flashes once when the remote unit transmits a reading upon start up or the TX button is pressed.

2 – LCD DISPLAY
LCD displays the temperature, humidity, channel number, low battery status.

3 – TX BUTTON
Press TX button to transmit a reading, the LED flashes once before the battery cover is closed.

4 – CHANNEL SELECTOR
Channel is to be selected before batteries are installed.

5 – WALL MOUNT HOLE
For mounting the sensor on a wall.

6 – °C/°F SWITCH
Selects between Celsius (°C) and Fahrenheit (°F)

7 – BATTERY COMPARTMENT
Requires 2 x AAA alkaline batteries
(not included).

8 – TABLE STAND
Stands the remote unit on a flat surface.

INSTALLATION OF BATTERIES

REMOTE SENSOR:

1. Open the battery compartment located at the back of the sensor. Remove the 2 screws on the battery cover.
2. Select the desired channel: 1, 2 or 3.
   Note: If you wish to use more than one remote sensor, each sensor must be designated a separate channel.
3. Press the ˚C/˚F button to select between Celsius (˚C) or Fahrenheit (˚F) setting.
4. Insert 2 x AAA alkaline batteries (not included) in the battery compartment following the polarity markings as shown inside the compartment.
5. Close the battery cover and reattach screws.

WEATHER STATION (MAIN UNIT):

1. Open the battery compartment located at the back of the unit.
2. Insert 2 x AA alkaline batteries (not included) in the battery compartment following the polarity markings as shown inside the compartment.
3. Close the battery cover.

LOW BATTERY WARNING

When the battery capacity of the remote sensor is low, a crossed battery symbol will appear in the outdoor temperature display of the main unit. It is time to replace with fresh batteries.

When capacity of batteries of the main unit is low, a crossed battery symbol will appear in the time display of the main unit. Please replace the low batteries with new ones.

HOW TO USE THE TABLE STAND OR WALL MOUNT

The main unit has a removable table stand. It may also be mounted on the wall once the stand is removed. The remote sensor can also stand on a table top or on the wall.

RANGE:

The maximum range of the radio signal is 20 to 30 m. It is reduced, however, when the radio signal is interrupted by a wall, a window or obstructions. Depending on the material and angle involved, the range can be reduced down to just a few meters. Different positioning of the sensor and main unit should be tested in order to obtain an optimal location for both units before deciding upon a final position.

The housing of the sensor and weather station is weather proofed. It is recommended, however, that both units be placed out of direct sunlight and protected against rain and snow.

SENDING AND RECEIVING OF RADIO SIGNAL

As soon as batteries are properly inserted, the main unit begins a three minute search for the remote sensor signal. The units are then synchronized. The remote sensor transmits readings with temperature and humidity data approximately every 50~56 seconds. Reception to the main unit is confirmed on the LCD display when the received outdoor temperature and humidity is updated. The main unit will automatically update its readings in intervals of approximately 50~56 seconds. For control purposes the LED of the remote sensor lights red during the transmission when the TX button is pressed.

If no signals are received, blanks "—". will appear in the LCD display of the main unit. Press **Channel** button for 2 seconds to force another search whereby the main unit and remote sensor will again be synchronized. Press **Channel** button to view the outdoor temperature from the remote sensors.

OUTDOOR TEMPERATURE AND HUMIDITY

The outdoor temperature and humidity appears on the second line of the LCD display. If transmission from the remote sensor to the main unit is interrupted for more than 60 minutes, "----" is displayed. When this occurs check the remote sensor. Press **Channel** button on the main unit for 2 seconds to re-synchronize the external sensor for 3 minutes again. Press **Channel** button to view the outdoor temperature in the sequence of:

Sensor 1 →Sensor 2→Sensor 3 → Sensor 1-3 circular display (icon turns on) →Sensor 1

INDOOR TEMPERATURE AND HUMIDITY

The indoor temperature and humidity is shown on the third line of LCD display. Data is transferred simultaneously from the remote sensor for both outdoor temperature and humidity. When transmission is interrupted "—" appears in the temperature and humidity field of the display.

COMFORT INDICATOR

There are 3 comfort indicators: dry, wet and comfort:

1. Dry : Indoor humidity < 40%
2. Comfort : Indoor temperature: 20°C ~ 26°C (68°F ~ 78.8°F), indoor humidity: 40 ~ 70%
3. Wet: Indoor humidity > 70%

INTERRUPTED RADIO SIGNAL TRANSMISSION

If the main unit does not register signal reception from the remote sensor "—" will appear in the display of the main unit. In this case. Press **Channel** button for 2 seconds thereby synchronizing the main unit and the remote sensor. If this fails and data is still not received please check the following:

1. Whether the remote sensor is still in place.
2. Whether the batteries in the main unit and in the remote sensor are still functioning and change if necessary. ***Note: At low temperatures, especially with frost, the voltage of the batteries in the outdoor remote sensor can be greatly reduced. This can result in a reduced transmission range. When outdoor temperatures are below 0˚C (32˚F) it is recommended to use lithium batteries in the outdoor sensor.***
3. Whether the transmission is within range and path is clear of obstacles and interference. Shorten the distance when necessary.
4. Signals from other household devices such as computers, TV, security systems, etc. may interfere with the radio signals of this unit. If necessary, please relocate weather station and sensor(s).

STATUS OF THE SIGNAL TRANSMISSION

2 possible forms of transmission can be shown on the display of the main unit:

The unit is in searching mode	
No signals	

MAXIMUM AND MINIMUM TEMPERATURE AND HUMIDITY

The Weather Station automatically stores the respective maximum and minimum values for temperature and humidity for indoors and outdoors.

To display these values press the MAX/MIN button:

- Press once to display the maximum values for temperature and humidity readings stored since the last clearing of the memory. The display will indicate: “MAX“.
- Press the MAX/MIN button a second time to display the minimum values for temperature and humidity. The display will indicate: “MIN“.
- Press the MEM button for 3 seconds to erase the stored values.
- The minimum and maximum values of the selected remote sensor (1, 2 or 3) are also displayed by pressing the MAX/MIN button.

TREND DISPLAY FOR TEMPERATURE AND HUMIDITY

The LCD display of the main unit has four trend indicators which predict the direction in which the temperature and humidity are changing:

- Trend arrow for indoor temperature
- Trend arrow for outdoor temperature
- Trend arrow for indoor humidity
- Trend arrow for outdoor humidity

Arrow indicator			
Temperature humidity trend	Rising	Steady	Falling

TEMPERATURE ALARM

The Weather Station is equipped with a temperature alarm where a customized temperature can be selected.
When the selected temperature is reached an acoustic alarm will sound. The temperature alarm is programmed as follows:

1. Press the ALERT button to activate the temperature alarm, the icon will display.
2. Hold the ALERT button for 2 seconds to set the upper temperature alarm.
3. Select the desired temperature (from current temperature to 70°C) for the upper temperature alarm using the UP and DOWN buttons.
4. Press ALERT button to confirm the upper temperature alarm and to set the lower temperature alarm.
5. Select the desired temperature (from -40°C to the current temperature) for the lower temperature alarm using the UP and DOWN buttons.
6. Press ALERT button to confirm.

TEMPERATURE ALARM

Temperature alert indicator				
Temperature alarm status	Temperature alarm OFF	Temperature alarm ON	Setting upper temperature alarm	Setting lower temperature alarm

ACTIVATING THE TEMPERATURE ALARM

When the temperature alarm turns on, an acoustic alarm will be initiated (with 3 continuous alarm sounds, 4 beeps each time) every minute if the temperature of the channel displayed reaches the preset alert temperature.

The temperature alarm stops when the temperature no longer meets the customized temperature setting or when the ALERT button is pressed to disable the temperature alarm function.

WEATHER FORECAST

This unit is capable of detecting atmospheric pressure changes. Based on collected date it can predict the weather for the upcoming 12 to 24 hours.

Display							
Forecast	Sunny	Partially Cloudy	Cloudy	Rain	Snowy	Heavy Rain	Heavy Snow

Note:

- The accuracy of a general pressure-based weather forecast is 70%.
- The weather forecast indicates the forthcoming change and not necessarily the current weather situation.
- The symbol “Sunny” applies also to night time. It indicates clear skies/without clouds.

ATMOSPHERIC PRESSURE TREND INDICATOR

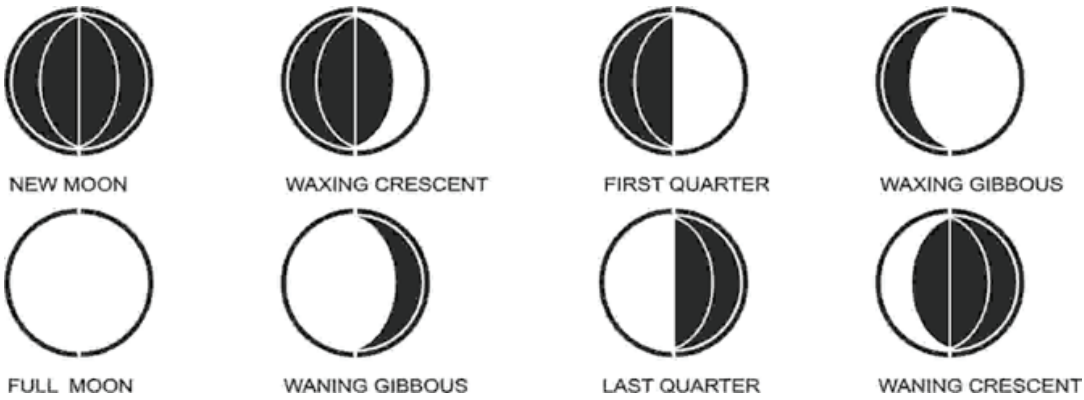
The atmospheric pressure indicator in the weather forecast window of the main unit uses arrows to indicate trend changes in atmospheric pressure and therefore weather changes:

Arrow indicator			
Pressure trend	Rising	Steady	Falling

- Rising pressure = the weather is changing for the better (fair weather)
- Falling pressure = the weather is changing for the worse (inclement weather)

MOON PHASE

The weather station is equipped with a moon phase display which indicates eight moon phases from new moon to waning crescent.



ATOMIC CLOCK

The weather station is equipped with an atomic clock. It functions with utmost precision. The transition from normal time to day light savings time is automatic.

- Once the batteries are inserted the clock will automatically search for the radio signal after it synchronizes with the outdoor sensor(s). This process is completed within approximately 3 to 7 minutes.
- As soon as the radio signal has been received the time will be displayed (hour, minutes and seconds). The symbol will appear in the display as confirmation of a successful radio signal reception.
- If the search for the radio signal is not successful the symbol will not appear. Instead the symbol for signal search will be displayed. The time may need to be set manually.
- If the radio signal is not received, press the -/RCC button for 2 seconds to initiate a search for the radio signal.

- During radio reception, press the -/RCC button will stop the radio reception.
- The atomic clock will automatically receive the WWVB time code during the middle of the night. The signal is automatically sent at intervals at 2:03 am, 3:03 am and 4:03 am.

  Note: The radio controlled signal for time (WWVB 60 KHz) is transmitted from the WWVB radio station derives its signal from the NIST Atomic clock in Boulder, Colorado.

It has a reception range of approximately 3,218 kms (2000 miles). Obstructions such as concrete walls can reduce the signal range.

TIME, DATE AND ALARM DISPLAY MODE

The main unit receives and displays together with the time and the date. Press MODE for the following:

- Press TIME to change the display between the calendar year or calendar day of week.
- Press ALARM button to switch between time, alarm1 or alarm2.
- Press the +/HR button to switch among the time zone in the sequence as the following:

Pacific Time (P) → Mountain Time (M)→ Central Time (C)→ Eastern Time (E)→ P.

MANUAL SETTING OF DATE, TIME

Press TIME button for 2 seconds the setting values to be changed begins to flash. Use the + button to increase and the - button to decrease the value. If the values are not numerical the + and - button will offer other possibilities. The sequence of the values to be set are the following:

1. Calendar Year
2. Sequence of Date (Month/Day or Day/Month) Display
3. Month
4. Day

5. Languages (7), English (EN), German (GE), Italian (IT), French (FR), Dutch (NE), Spanish (ES), Danish (DA)
6. Hour Format 12 or 24 hour
7. Hour
8. Minutes
9. DST On or Off

Note:
1. *When the minute value is edited; the seconds value is reset to 00.*
2. *If no buttons are pressed within 8 seconds, it will exit the manual time set mode.*

TEMPERATURE DISPLAY

Press DOWN to toggle the temperature display between Celsius and Fahrenheit

PRESSURE DISPLAY

Press UP to toggle the pressure display between mb/Hpa and inHg.

SETTING THE ALARM

Press ALARM button to view the current time, alarm1 time or alarm2. In alarm1 display, press ALARM button for 2 seconds until the alarm1 hour flashes. Press + or - to increase or decrease the alarm hour. Press ALARM to confirm the alarm1 hour. The alarm1 minute display flash. Press + or - to increease or decrease the alarm minute. Press ALARM to confirm the alarm1 time setting.

For alarm2 setting, press ALARM button until alarm2 is display. Repeat the above alarm setting procedure.

Note: If no buttons are pressed within 8 seconds, it will exit the alarm time set mode.

TURN ON THE ALARM

Press the -/RCC button, it will turn the alarm on/off in the following sequence:

Alarm1 on → Alarm2 on → Alarm1 & Alarm2 on

→ Alarm1 & Alarm2 off→ Alarm1 on

SNOOZE ALARM AND DISPLAY LIGHTING

The SNOOZE button is on the front side of the weather station. When the time reaches the corresponding alarm time, the alarm is activated for maximum 2 minutes and the alarm icon (or) flashes. Press snooze to stop the alarm and the backlight will turn on for 5 seconds and the corresponding alarm icon and the "**Zz**" icon will flash for 5 minutes. After 5 minutes the alarm will activate again. When the alarm is sounding, press any button except the snooze button to stop the alarm.

During the snooze period, press any button except the snooze button to stop the snooze function.

VIEW PRESSURE HISTORY

Press the HISTORY button to view the past 12 hours' pressure history in the sequence of (0, -1, -2, ..., -9, -10, -11, -12, 0).

LOCATION SETTING FOR SUNRISE AND SUNSET

The lowest line of the LCD display shows the sunrise and sunset time of the city selected. Press LOCATION for 3 seconds the ON location flashes. Press +/HR or -/RCC to search the city. Press LOCATION to confirm the city.

The abbreviation of the city name is listed below:

	CITY	ABBR.		CITY	ABBR.
1	ATLANTIC	AIY	26	NEW ORLEANS	MSY
2	ALASKA	ALA	27	BALTIMORE	MTN
3	ATLANTA	ATL	28	NEWYORK	NYK
4	NASHVILE	BNA	29	OKLAHOMA CITY	OKC
5	BOSTON	BOS	30	ORLANDO	ORL
T	BUFFALO	BUF	31	PORTLAND	PDX
7	CHICAGO	CHI	32	PHILADELPHIA	PHL
8	CLEVELAND	CLE	33	PHOENIX	PHX
9	CHARLOTTE	CLT	34	PITTSBURGH	PIT
10	CINCINNATI	CVG	35	RALEIGH	RDU
11	DENVER	DEN	36	RICHMOND	RIC
12	DALLAS	DFW	37	SAN ANTONIO	SAT
13	DETROIT	DTT	38	SEATTLE	SEA
14	HONOLULU	HNL	39	SAN FRANCISCO	SFO
15	HOUSTON	HOU	40	SAN JOSE	SJC

LOCATION SETTING FOR SUNRISE AND SUNSET

	CITY	ABBR.		CITY	ABBR.
16	INDIANAPOLIS	IND	41	SALT LAKE CITY	SLC
17	LAS VEGAS	LAS	42	SACRAMENTO	SMF
18	LOS ANGELES	LAX	43	ST.LOUIS	STL
19	LITTLE ROCK	LIT	44	TUCSON	TUS
20	LINCOLN	LNK	45	WASHINGTON	WAS
21	MIAMI	MIA	46	MONTREAL	YMQ
22	KANSAS CITY	MKC	47	OTTAWA	YOW
23	MILWAUKEE	MKE	48	QUEBEC	YQB
24	MADISON	MSN	49	VANCOUVER	YVR
25	MINNEAPOLIS	MSP	50	TORONTO	YYZ

PRECAUTIONS:

- In the case of a malfunction do not attempt to take the weather station apart or repair yourself as this may void the warranty.
- The weather station is a technical precision device which can be damaged by dropping, banging or other forceful treatment.
- The main unit is not weatherproof. It should be protected from rain and humidity which could cause damage.
- A soft cloth may be used to clean your weather station.
- Never attempt to use any corrosive cleaners or chemical solution on the weather station.
- Remove the batteries if the weather station is stored or not in use.

SPECIFICATIONS

BAROMETER:
- Weather forecast for approximately12 to 24h depicted by symbols
- Past 12 hours barometer bar chart
- Weather trend

THERMOMETER:
- Radio signal transmission of temperature and humidity data from up to 3 remote sensors (one sensor included)
- Radio signal transmission range max. 20-30 m
- Measured outdoor temperature range: -40°C to 70°C (-40°F to +158°F)
- Built-in sensor for room temperature:
- Measured indoor temperature range: -10°C to 70°C (+14°F to +158°F)
- Temperature trend indicator
- Minimum and maximum temperature stored in memory
- Programmable temperature alarm

HYGROMETER:
- Display of 20% to 99% for indoor and outdoor humidity
- Humidity trend indicator
- Minimum and maximum humidity stored in memory
- Comfort level indicator: WET, COMFORT, DRY

RADIO SIGNAL CONTROLLED CLOCK
- Precise, silent and battery operated
- Radio signal controlled time (WWVB 60 KHz) with automatic change between daylight savings time and normal time
- LCD display of time, date, week day
- Alarm function (alarm1, alarm2)
- Moon phase indicator

SUNRISE AND SUNSET
- 50 cities sunrise and sunset information

GENERAL:
- Transmission frequency: 433 MHz
- Power supply for main unit and remote sensor:
  Main unit: 2 x AA alkaline batteries
  Remote Sensor: 2 x AAA alkaline batteries
- Stand or wall mount
- Main unit: 105x225x31 mm and 375 g (w/o batteries)
  Remote Sensor: 56x105x22 mm and 65 g (w/o batteries)

FCC STATEMENT

The FCC Wants You to Know

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for additional suggestions.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Where shielded interface cables have been provided with the product or specified additional components or accessories elsewhere defined to be used with the installation of the product, they must be used in order to ensure compliance with FCC regulation.

Industry Canada Notice

This device complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

(1) this device may not cause interference, and

(2) this device must accept any interference, including interference that may cause undesired operation of the device.

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of Industry Canada.

IC Number:255A-8001231

WARRANTY

LIMITED WARRANTY

THE SOURCE WARRANTY

The Source warrants that this product will be free from defects in materials and workmanship for a period of one (1) year from the date of purchase. Within this period, simply take the product and your proof of purchase to any The Source store or dealer and the product will be repaired without charge for parts and labour. The Source reserves the right to charge for transportation. Any product which has been subject to misuse or accidental damage is excluded from this warranty.

This warranty is only applicable to a product purchased through The Source company owned stores and dealers and to a product that is presented for repair in a country where The Source offers the product for sale. While this warranty does not confer any legal rights other than those set out above, you may have additional statutory rights which will vary under the laws of the various countries, states, province and other governmental entities in which The Source operates. This warranty is subject to all statutory rights you may have in the country of purchase.

Imported by:
The Source,
Barrie, Ontario, Canada, L4M 4W5

Manufactured in China

For product support please contact
www.thesource.ca

Please Recycle

Limited Warranty

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